BILL NO. S-90-07-42

SPECIAL ORDINANCE NO. S-199-90

**AN ORDINANCE** approving the awarding of Reference #952 by the City of Fort Wayne, Indiana, by and through its Department of Purchasing and **THERMO JARRELL ASH** for the Water Pollution Control Plant.

**NOW, THEREFORE, BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF FORT WAYNE, INDIANA;**

**SECTION 1.** That Reference #952 between the City of Fort Wayne, by and through its Department of Purchasing and **THERMO JARRELL ASH** for the Water Pollution Control Plant, respectfully for:

> the purchase of an automic absorption spectrophotometer to monitor industrial discharge and plant discharge for EPA Industrial Monitoring and NPDES Permit compliance, for the Water Pollution Control Plant;

involving a total cost of Seventy-One Thousand Three and 60/100 Dollars ($71,003.60), all as more particularly set forth in said Reference #952 which is on file in the Office of the Department of Purchasing, and is by reference incorporated herein, made a part hereof, and is hereby in all things ratified, confirmed and approved.

**SECTION 2.** That this Ordinance shall be in full force and effect from and after its passage and any and all necessary approval by the Mayor.

Paul M. Burns
Councilmember

APPROVED AS TO FORM
AND LEGALITY

J. Timothy McCaulay
J. Timothy McCaulay, City Attorney

| | |
|---|---|
| REF. NO.: | 952 |
| DEPT.: | WPC PLANT |
| DATE: | 7/17/90 |
| ITEM/SERV.: | AA UNIT W/FURNACE |

PURCHASING INFORMATION

| | |
|---|---|
| ADVERTISED BID: | YES |
| DATES ADVERTISED: | 5/29 & 6/5/90 |
| OPENING DATE: | 6/21/90 |
| WRITTEN QUOTE: | |
| DUE DATE: | |
| VERBAL QUOTE: | |
| SINGLE SOURCE: | |
| NO. OF VENDORS NOTIFIED: | 11 |
| NO. OF VENDORS RECEIVING BID: | 3 |
| NO. OF VENDORS RETURNING BID: | 3 |
| NO. OF VENDORS DISQUALIFIED: | 0 |
| NO. OF VENDORS NOT RESPONDING: | 8 |
| DATE SENT TO DEPT FOR RECOMM.: | 6/21/90 |
| DATE RECOMMENDATION REC'D IN PURCH: | 7/17/90 |
| COUNCIL INFORMATION | DATES SENT EXTENSION DATES |
| DATE INFO SENT TO LAW DEPT.: | 7/17/90 |
| INTRODUCTION DATE: | 7/24/90 |
| DISCUSSION DATE: | 8/7/90 |
| PASSAGE DATE: | 8/14/90 |
| ORDINANCE NO.: | |

FRONT PAGE/INVITATION TO BID
DEPARTMENT OF PURCHASING
CITY OF FORT WAYNE, ALLEN COUNTY, INDIANA
ONE MAIN STREET - ROOM 350
PHONE 219-427-1101

BID OPENING DATE 6-21-90 @ 11:00 AM BID REFERENCE # 952

SEALED BIDS SHOULD BE DELIVERED TO DEPARTMENT OF PURCHASING, ROOM 350, CITY-COUNTY BUILDING UP TO 11:00 A.M. ON OR BEFORE OPENING DATE.

SEALED BIDS WILL BE OPENED PUBLICLY AT 11:01 A.M. IN THE BOARD OF WORKS & SAFETY CONFERENCE ROOM ON THE THIRD FLOOR OF THE CITY-COUNTY BUILDING. "NO LATE BIDS WILL BE ACCEPTED AFTER 11:00 A.M. FOR ANY REASON WHATSOEVER".

THIS INVITATION FOR BID IS FOR AUTOMATED ATOMIC ABSORPTION SPECTROMETER PER SPECIFICATIONS

AND REQUESTED BY WATER POLLUTION CONTROL PLANT

THIS BID REQUIRES A XXXX 5% BID BOND, CERTIFIED OR CASHIER'S CHECK OF ALL BIDDERS.

THIS BID REQUIRES A XXXXX 100% PERFORMANCE BOND OF SUCCESSFUL BIDDER(S).

PROMPT PAYMENT DISCOUNTS WILL BE ALLOWED AS FOLLOWS: _____% IF PAID WITHIN _____ DAYS.

THIS INVITATION IS ISSUED TO ESTABLISH A CONTRACT TO SUPPLY THE CITY OF FORT WAYNE WITH A COMMODITY OR SERVICE IN ACCORDANCE WITH ACCOMPANYING SPECIFICATIONS.

THE EXECUTION HEREOF BY THE BIDDER IS ACCEPTANCE OF ALL TERMS AND CONDITIONS HEREIN AND IN THAT REGARD THE BIDDER AGREES TO BE BOUND BY SAME AND BE BOUND TO THE AMOUNT OF HIS/HER BID FOR A PERIOD OF NINETY (90) DAYS.

FIRM NAME Thermo Jarrell Ash

STREET ADDRESS 8E Forge Parkway

CITY Franklin, MA 02038 PHONE # 508-520-1880 ext 170

BY Donald R Barlock
REPRESENTATIVE SIGNATURE

Prescribed by the State Board of Accounts

Form No. 95 (Revised 1987)

# BID, OFFER OR PROPOSAL FOR SALE OR LEASE OF MATERIALS

(Defined at I.C. 36-1-2-9.5)
(Please type or print)

Date: 6-20-90

1. Governmental Unit: City of Fort Wayne
2. County: allen
3. Bidder (Firm): Thermo Jarrell Ash
   Address: 8E. Forge Parkway
   City/State: Franklin / MA. 02038
4. Telephone Number: 508-520-1880 ext 170
5. Agent of Bidder (If applicable): Donald R. Baslock

Pursuant to notices given, the undersigned offers bid(s) to City of Ft. Wayne (Governmental Unit) in accordance with the following attachment(s) which specify the class or item number or description, quantity, unit, unit price and total amount.

The contract will be awarded by classes or items, in accordance with specifications. Any changes or alterations in the items specified will render such bid void as to that class or item. Bidder promises that he has not offered nor received a less price than the price stated in his bid for the materials included in said bid. Bidder further agrees that he will not withdraw his bid from the office in which it is filed. A certified check or bond shall be filed with each bid if required, and liability for breach shall be enforceable upon the contract, the bond or certified check or both as the case may be.

Donald R Baslock
Signature of Bidder or Agent

## BID OFFER OR PROPOSAL

Attach separate sheet listing each item bid based on specifications published by governing body. Following is an example of the bid format:

| Class or Item | Quantity | Unit | Description | Unit Price | Amount |
|---|---|---|---|---|---|
| | | | | | |

## NON-COLLUSION AFFIDAVIT

STATE OF ~~INDIANA~~ Michigan )
) SS:
Washtenaw COUNTY )

The undersigned bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee, gift, commission or thing of value on account of such sale.

Thermo Jarrell Ash
Bidder (Firm)
Donald R Baslock
Signature of Bidder or Agent

Subscribed and sworn to before me this 20th day of June, 1990.

Edward A Szczepanowicz
Notary Public

My Commission Expires: NOTARY PUBLIC, WAYNE COUNTY, MICHIGAN MY COMMISSION EXPIRES AUGUST 20, 1993 ACTING IN WASHTENAW COUNTY, MICHIGAN

County of Residence:

EDWARD A. SZCZEPANOWICZ
NOTARY PUBLIC, WAYNE COUNTY, MICHIGAN
MY COMMISSION EXPIRES AUGUST 20, 1993
ACTING IN WASHTENAW COUNTY, MICHIGAN

Notary Public Printed Name

## ACCEPTANCE

There now being sufficient unobligated appropriated funds available, the contracting authority of _____ (Governmental Unit) hereby accepts the terms of the attached bid for classes or items numbered _____ and promises to pay the undersigned bidder upon delivery the price quoted for the materials stipulated in said bid.

Date: _____

Contracting Authority Members:

_____ _____
_____ _____
_____ _____

# SPECIFICATIONS
# FOR
# ATOMIC ABSORPTION SPECTROMETER

## Scope

To provide an automated Atomic Absorption Spectrometer system as described by the following system specifications.

The system components shall meet or exceed the following specifications.

1. Spectrometer

   a. Double beam optical system with dualgrating monochromator.
   b. Double beam UV/Visible continuum source background corrector for flame operation.
   c. Czerny - Turner design monochromator with 408 mm focal length.
   d. Maximum light dispersion of 0.65 nm/mm in UV range and 1.3 nm/mm in visible range.
   e. Usable wavelength range of 185 nm to 930 nm.
   f. Air-tight photometer for corrosion protection.
   g. Motorized 6-position lamp turret.
   h. Automatic gas controls with safety interlocks.
   i. Automatic setup and control of wavelength, spectral bandwidth, and slit configuration to method specification.
   j. Automatic gain and intensity control.
   k. Dual monochromator slit height configurations for optimum flame and furnace operation.
   l. Digital electronics.

2. Burner System

   a. Corrosion resistant nebulizer.
   b. Impact bead for air-acetylene operation.
   c. Flow spoiler for nitrous oxide-acetylene operation.
   d. Single slot, 10cm, titanium burner head for air-acetylene operation
   e. Single slot, 5 cm, titanium burner head for nitrous oxide-acetylene operation.

3. Graphite Furnace

a. Zeeman background correction.
b. L'vov platform graphite tube capability.
c. Full wavelength range background correction with optional continuum source correction.
d. Peak height and peak area capability.
e. Heating rate above 2000° c/second.
f. Photodiode temperature control.
g. Background correction greater than 2.0 absorbance units.
h. Built in rollover protection.
i. Or system equivalent to above

4. Autosampler for Graphite Furnace

a. Automatic sample injection.
b. Automatic multiple injection.
c. Automatic calibration.
d. Automatic re-calibration during sample run.
e. Automatic standard addition.
f. Automatic Matrix modification.
g. Sample tray capacity for 40 samples.
h. Sample injection volume adustable from 5 to 99 uL.
i. Require line item quote on cost for furnace autosampler.

5. Autosampler for Flame Operation

a. Sequential or random access.
b. Sample tray capacity for 54 samples.
c. Automatic calibration.
d. Automatic re-calibration during sample run.
e. Automatic single or multi-element analysis.
f. Require line item quote on cost for flame autosampler.

6. System Controller Assembly

a. IBM PS/2 Model 50Z Computer.
   1. 60 megabyte hard disk drive.
   2. 1.4 megabyte, 3.5 inch floppy disk drive.
   3. High resolution color display.
   4. Internal system clock.
   5. RS - 232C.
   6. Parallel and mouse interfaces.
   7. PC DOS operating system.
   8. Built in graphics controller.
   9. Graphics controller compatible with VGA, EGA, CGA, and MDA.

b. Epson Ex-800 Printer
   1. Parallel interface.
   2. 250 CPS draft mode, 60 CPS NLQ mode.
   3. 8k print buffer.
   4. Friction or tractor feed.
   5. Graphics capability.

7. Data Handling

a. Complete accessability to programming all facets of all instrumentation from single keyboard.
b. Mouse unit accessory control.
c. Window menu driven accessory for set up.
d. Standard conditions availability from hard disk.
e. QA/QC method storage availability/backup capability.
f. Program capability for check samples.
g. Detailed "Help" programming.
h. CRT display of real time curve graphs and analytical results.
i. Calibration programming with minimum of 8 pts potential.
j. Slope correction of curve via single standard.
k. Statistics availability of Standard Deviation/Relative Standard Deviation/Average.
l. Ability to define report format utilizing file server.
m. Layout capability for direct user specifications allowing customized monitoring of progress.
n. Capability to assign sample identification number to particular sample.
o. Continual standard curve updates with each additional standard sampled.
p. Ability to overlay standard curves for comparison.
q. Peak graphs accessible for real time viewing or taken from file server to compare past accuracy to current conditions.
r. Capability to customize final reports.

8. Electrodeless Discharge Lamp Power Supply

a. Single channel.
b. Continuous or pulsed operation.
c. Adjustable power to 30 watts.

9. Lamps

a. Arsenic EDL Coded.
b. Cadmium EDL Coded.
c. Lead EDL Coded.
d. Mercury EDL Coded.
e. Selenium EDL Coded.
f. Cadmium HCL Coded.
g. Chromium HCL Coded.
h. Copper HCL Coded.
i. Lead HCL Coded.

j. Nickel HCL Coded.
k. Zinc HCL Coded.
l. Tin HCL Coded.

10. Automated Mercury/Hydride System

a. Cell alignment by burner head adjust controls.
b. Program sequences with selectable time parameters.
c. Temperature controlled cell assembly from 100° to 1000°c.

11. Miscellaneous

a. Two complete sets of Operation and Maintenance manuals, including schematics, to be received with each instrument.
b. Installation and checkout to be performed by manufacturer's field engineer.
c. Installation and checkout according to manufacturer's specifications.
d. Operator familiarization to be conducted during installation and checkout.
e. Bidder to supply complete system specifications.
f. Bidder to list all exceptions to purchaser specifications.
g. Bidder to supply 12 month service contract.

12. Warranty

a. For a period of one year for parts.
b. For a period of one year for labor.
c. Warranty period to begin subject to 30 consecutive days of on-site, trouble-free system operation.

13. Training

a. Training for 2 individuals on flame and furnace applications to be given at factory training facilities.
b. Training to be available anytime within 2 years of beginning of warranty period.

for each system

14. Trade-In Allowance

a. Request bidder to quote allowance for trade-in of one or two units.
b. Request bidders to supply allowance quote for each unit separately.
c. Units to be quoted for trade-in are:
   1) Instrumentation Labs 251AA, with 655 furnace.
   2) Perkin Elmer AA2380, with HGA 400 furnace.

CERTIFICATION OF BIDDER/VENDOR

The undersigned, on behalf of Thermo Jarrell Ash does hereby make the following representations to the City of Fort Wayne, Indiana.

WHEREAS, it is acknowledged that the Common Council of the City of Fort Wayne, Indiana, has passed an ordinance condemning the apartheid policies of the country of South Africa;

WHEREAS, council's ordinance requires that all persons, firms or corporations submitting bids to the City, for goods and services, certify, as part of the bid, that such entity does not support the policies of apartheid in South Africa.

The undersigned states, on behalf of Thermo Jarrell Ash, that Thermo Jarrell Ash does not support or endorse the policy of apartheid in South Africa.

IN WITNESS WHEREOF, this certification has been signed this 20 th day of June, 19 90.

Thermo Jarrell Ash

Name of Bidder/Vendor

Donald R Babcock Sr Sales Engineer

Name and Title of Person Signing

CITY OF FORT WAYNE
AFFIRMATIVE ACTION PROGRAM

NAME OF COMPANY Thermo Jarrell Ash

ADDRESS 8E. Forge Parkway CITY Franklin, MA.

ZIP 02038 PHONE 508-520-1880

Identify by title and name the highest official within the facility who has the overall responsibility for the implementation of the Equal Employment Opportunity and Affirmative Action Program.

Donald R. Baslock — Sr. Sales Engineer
Please Print — Title

Date 6/20/90 Signature Donald R Baslock

1. Does your firm have a written Affirmative Action Program? X Yes _____ No

   A. If so, and it contains answers to the questions asked in this program, attach a copy and sign the Written Statement of Company Policy.

   B. If not, do you accept the following program in meeting the requirements of the City of Fort Wayne? _____ Yes _____ No

**PLEASE KEEP IN MIND THAT FAILURE TO COMPLETE ALL SECTIONS OF THIS DOCUMENT WILL RESULT IN YOUR PROGRAM BEING REJECTED**

2. Will your firm make every effort to increase employment of minorities at all levels of its workforce with particular emphasis to categories where few, if any, minority people are employed? X Yes _____ No

3. Current number of employees 251
   Number of employees as of October 1989 _____
   January 1990 [illegible] March 1990 ~~254~~ July 1990 _____

4. Workforce Analysis:

| JOB CLASSIFICATION | WAGE RATE OR SALARY RANGE | TOTAL |
|---|---|---|
| Officials & Managers | | 36 |
| Professionals | | 73 |
| Technicians | | 20 |
| Sales workers | | 18 |
| Office & clerical | | 38 |
| Craft workers | | 47 |
| Operatives | | 5 |
| Laborers | | 0 |
| Service workers | | 4 |
| | | |

| EMPLOYEES BY RACE/ETHNICITY/SEX | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| W | | BLK | | H | | OTHER | | (DESIGNATE) |
| M | F | M | F | M | F | M | F | |
| | | | | | | | | |
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Handicapped: X Yes _____ No

List Number 3

B - Black (not of Hispanic Origin) H - Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture of origin) AI, AN - American Indian or Alaskan Native API - Asian or Pacific Islanders F - Females

5. If total minority employment is less than 20% give reasons why. (Do not include Females when you figure minority employment percentages.)
The company has had few turnovers & for those openings we have recruited & 50% of minorities to fill these jobs.

6. List minority recruitment sources:
Dept. of Employment & Training, MA Norwood & Milford offices

7. Does your company anticipate an increase in employment this year? _____ Yes X No

Approximately how many? _____

8. What specific goals can you achieve for the employment of minorities in the following labor classifications during 1990:

| | | |
|---|---|---|
| A. | Officials and Managers | _____ % |
| B. | Professionals | _____ % |
| C. | Technicians | _____ % |
| D. | Sales Workers | _____ % |
| E. | Office and Clerical | 5 % |
| F. | Skilled Craftsmen | 10 % |
| G. | Other | _____ % |

9. **WRITTEN STATEMENT OF COMPANY POLICY**

IT IS THE POLICY OF Thermo Jarrell Ash that Equal Employment Opportunity be afforded to all qualified persons without regard to race, sex, religion, color or national origin. In support of this policy Thermo Jarrell Ash will not discriminate against any employee or applicant for employment because of race, religion, sex or national origin. The Company will take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, sex or national origin. Such action will include but not be limited to: recruitment, advertising or solicitation for employment hiring, placement, upgrading transfer or demotion, selection for training including apprenticeship rates of pay or other forms of compensation, layoffs or termination.

Thermo Jarrell Ash — 6-20-90
Name of Company or Firm — Date

Donald R Bosloch
Signature of Highest Company Official

Donald R. Bosloch — Sr. Sales Engineer
Name and Title of Signer (Please Type or Print)

# STATISTICAL INFORMATION
# FOR
# AFFIRMATIVE ACTION/CONTRACT COMPLIANCE

Thermo Darrell Ash
Name of Contractor or Supplier

Donald Bastocke
(Information Given By)

8E. Forge Parkway, Franklin, MA 02038
Address And Telephone Number

Donald P. Bastocke 6/20/90
(Person Filling Out This Form And Date)

| EOC CATEGORY | EMPLOYEES BY RACE/ETHNICITY/SEX | | | | | | | | | HANDICAPPED EMPLOYEES | | | | | | | | | TOTAL EMPLOYEES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | W | | BLK | | H | | Other | | | W | | BLK | | H | | Other | | | |
| | M | F | M | F | M | F | M | F | (Designate) | M | F | M | F | M | F | M | F | (Designate) | |
| OFFICALS & ADMINISTRATORS | 33 | 3 | - | - | - | - | - | - | | | | | | | | | | | 36 |
| PROFESSIONALS | 60 | 7 | 1 | - | 3 | - | 2 | - | | | | | | | | | | | 73 |
| TECHNICIANS | 23 | 2 | 1 | - | 4 | - | - | - | | | | | | | | | | | 30 |
| OPERATIVES | 27 | 15 | - | - | 4 | - | 1 | - | | | | | | | | | | | 47 |
| LABORER | 0 | - | - | - | - | - | - | - | | | | | | | | | | | 0 |
| OFFICE AND CLERICAL | 13 | 24 | - | 1 | - | - | - | - | | | | | | | | | | | 38 |
| SKILLED CRAFT WORKERS | 1 | 3 | 1 | - | - | - | - | - | | | | | | | | | | | 5 |
| SERVICE-MAINTENANCE WORKERS | 2 | 1 | 1 | - | - | - | - | - | | | | | | | | | | | 4 |
| SALES WORKERS | 12 | 3 | 2 | - | - | - | - | - | | | | | | | | | | | 18 |
| TOTALS | 171 | 58 | 6 | 1 | 11 | - | 3 | - | | | | | | | | | | | 251 |
| PERCENTAGES | 68 | 23 | 2 | .5 | 4.5 | - | 1 | - | | | | | | | | | | | |

## CERTIFICATION OF NON-SEGREGATED FACILITIES

Each Bidder is required to file a fully executed Certificate of Non-Segregated Facilities once a year.

## CERTIFICATION OF NON-SEGREGATED FACILITIES

The Bidder certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The Bidder certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments and that he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The Bidder agrees that a breach of this certification will be a violation of the Equal Opportunity clause in any contract resulting from acceptance of this bid. As used in this certification, the term "segregated facilities" means any waiting room, work area, restrooms and washrooms, restaurant or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. The Bidder agrees that [except where the Bidder has obtained identical certification from proposed subcontractors for specific time periods] he will obtain identical certification from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause and that he will retain such certifications in his files.

NOTE: THE PENALTY FOR MAKING FALSE STATEMENTS IN OFFERS IS PRESCRIBED IN 18 U.S.C. 1001.

Date: 6/20/, 1990

Thermo Jarrell Ash
Name of Bidder

By: Donald R Bostock

Title: Jr. Sales Engineer

Official Address: [including zip code]

8E Forge Parkway
Franklin, MA. 02038

Thermo Jarrell Ash Corporation

8E Forge Parkway
Post Office Box 9101
Franklin, MA 02038-9101

(508) 520-1880
Fax (508) 520-1732
Telex: 174230 TJA UT

Bid #952 City of Fort Wayne 6/21/90

| Item | Quan | Unit | Description | Amount |
|---|---|---|---|---|
| Spectrophotometer | 1 or more | Smith/Hieftje 8000 | See quotation MH 1181 | $89106.80 ea. See quotation MH 1181 options |

15. Price Quote

We request the quote to be per each of the attached items. We also request an alternate quote, if more than one of each item is purchased.

REFERENCE NO. 952
ATOMIC ABSORPTION UNITS
WPC PLANT & FILTRATION PLANT

| ITEM | BASE | MORE THAN ONE |
|---|---|---|
| AA FURNACE | 62589.00 | 62589.00 |
| NITROUS OXIDE | 575.00 | 575.00 |
| AUTOSAMPLER | 9000.00 | 9000.00 |
| PRINTER | 1000.00 | 1000.00 |
| Shipping: | 400.00 | 400.00 |
| LAMPS | | |
| AS | 407.00 | 325.60 |
| CD | 292.00 | 233.60 |
| PB | 292.00 x 2 = 584.00 | 233.6 x 2 = 467.20 |
| HG | 242.00 | 193.60 |
| SE | 369.00 | 295.20 |
| CD | 292.00 | 233.60 |
| CR | 215.00 | 172.00 |
| CU | 226.00 | 180.80 |
| NI | 292.00 | 233.60 |
| ZN | 297.00 | 237.60 |
| SN | 275.00 | 220.00 |
| LAMP POWER SUPPLY | N/A | N/A |
| HG SYSTEM | 2750.00 | 2750.00 |
| FURNACE CUVETTES | 173.70/5 | 742.50/25 |
| EXT WARRANTY & Serv. Contract | 7000.00 | 7000.00 |
| TR MANUALS | 2000.00 | 2000.00 |
| TRAINING | 1000.00 | 1000.00 |
| TOTAL | 89978.70 | |

when purchased mixed lot of 10 or more

See Quotation: MH1181

FOB: FORT WAYNE

DELIVERY TIME: 30-120 days ARO.

TERM OF AGREEMENT: FROM TIME OF AWARD THRU 12-31-90

TRADE-IN ALLOWANCE FOR:

1) INSTRUMENTATION LABS 251AA WITH 655 FURNACE — 18606.80
toward one Smith/Hieftje unit.

2) PERKIN ELMER AA2380 WITH HGA 400 FURNACE — 18606.80
toward one Smith/Hieftje unit

Thermo Jarrell Ash

SPECIFICATION ALTERNATIVE DESIGNS/DEVIATIONS

1a Double beam optical system with single beam capacity for flame and furnace with grating optimized for full wavelength range.

1b Advanced background correction (Smith-Hieftje) corrects in UV/visible region for structured background both flame and furnace. Deuterium arc for UV is also supplied.

1c/d Ebert design 330 mm focal length monochromator has spectral bandpass of 0.08--2.0 nm vs. 0.07--2.0 nm suggested (bandpass is the final result of focal length, light dispersion of grating, and slit width. AA procedures use 0.2--2.0 nm bandpass normally).

1e 185-900 nm software defined with internal Hg wavelength reference source.

1g Motorized 8-position lamp cassette.

1k Extraneous emission mask is contained in the furnace head not monochromator slit area, flame & furnace operations are optimized with fewer optical components thereby increasing optical efficiency.

2c Flow spoiler is not required for high precision nitrous oxide-acetylene operation.

3a Advanced Smith-Hieftje background correction (EPA recognized equivalent to Zeeman is applicable to flame & furnace.

3g Background correction up to 3.0 absorbance both flame and furnace operations.

4g Autosampler accommodates upto 150 samples, rinse; 12 Q.C. or standard locations.

4h Sample volume deposited from 2 to 1998 microliters

5a Autosampler is random access as well as sequential.

5b Capacity upto 150 samples, rinse; 12 Q.C. or standard locations

6a NEC Powermate Plus (At compatible) computer with 12 mHz clock. 42 megbyte hard disk.. $5\frac{1}{4}$ inch floppy disk drive.

6b NEC 24 pin printer vs. 9 pin suggested.

7a All instrument programming flame/furnace from computer keyboard. Autogas box is addressed from instrument.

7i Calibration programming furnace with 12 standards (6 each channel) and upto 24 standards flame (6 each channel).

7r Includes ENABLE integrated software (word processor, graphics, database management, spreadsheet; telecommunications) for custom reports.

8 EDL's are not needed; not available.

9 EDL's are not needed. HCL have 1 year (5 amp-hour) intensity guarantee vs. 6 month competitor.

NOTE: The Smith-Hieftje 8000 instrument system is capable of analyzing <u>two</u> elements simultaneously by furnace and <u>four</u> elements simultaneously by flame analysis. Operational costs in terms of time, sample, reagents, gases, graphite cuvettes, etc. are easily $\frac{1}{2}$ by furnace and $\frac{1}{4}$ by flame as compared to competitive instruments. These efficiencies are obtained without any loss in analytical performance, accuracy and precision as compared with other AA units. The autodiluter/prepstation is applicable for furnace work, and uniquely for flame as well as other laboratory dilution procedures.

Thermo Jarrell Ash Corporation

8E Forge Parkway
Post Office Box 9101
Franklin, MA 02038-9101

(508) 520-1880
Fax (508) 520-1732
Telex: 174230 TJA UT

A Subsidiary of Thermo Instrument Systems, Inc.

# QUOTATION

Number MH1181

CITY OF FORT WAYNE
Department of Purchasing
Room 350
City/County Building
Fort Wayne, IN 47802

REF: BID NO. 952

We are pleased to quote, subject to the terms and conditions stated below and on the reverse side, our current prices as requested. Any performance requirements which exceed our standard specifications must be cleared with us in advance and must be stipulated on the purchaser's order.

Delivery: 30-120 Days ARO

Signature: Don Baslock

F.O.B.: Fort Wayne, IN

Prices Firm: 90 Days

Title: Don Baslock
Senior Sales Representative

Terms: Net 30 Days

Date: June 18, 1990

Balances remaining unpaid at due date are subject to service charge of 1.5% per month until paid.



| ITEM | QUAN. | CATALOG NUMBER | DESCRIPTION | UNIT PRICE | TOTAL PRICE |
|---|---|---|---|---|---|
| 1 | 1 | 008008-00 | SMITH/HIEFTJE 8000 AUTO AA WITH NEC COMPUTER (Flame Drawer Not Included) Completely automated atomic absorption spectrometer controlled by an external PC via ThermoSPEC software. Includes the NEC Powermate 286 Plus Microcomputer. All parameters for the spectrometer, furnace, autosampler and prep station are stored on disk as part of a customized method. These include wavelength, bandpass, lamp parameters, furnace temperatures, flame settings, etc. The system includes an eight lamp dual cassette with four lamp positions per cassette. The dual cassette is motor driven and computer controlled for automatic selection of lamp(s). As many as eight elements can be determined in an unattended run by either flame or furnace atomization. Furthermore, in the furnace mode, any two elements on the same lamp bank can be measured simultaneously; any four elements can by simultaneously determined by flame AA. Incorporates the R955 wide-range photomultiplier tube and Smith/Hieftje background correction as standard. Includes ThermoSPEC software for simplified methods development, scan storage, data management, and customized programming. Electrical configuration is 120V, 50/60 Hz. (008008-01 is 220V, 50/60 Hz and 008008-02 is 100V, 50/60 Hz.) | 38,470.00 | $38,470.00 |

Thermo Jarrell Ash Corporation

8E Forge Parkway
Post Office Box 9101
Franklin, MA 02038-9101

(508) 520-1880
Fax (508) 520-1732
Telex: 174230 TJA UT

A Subsidiary of Thermo Instrument Systems, Inc.



| ITEM | QTY. | CATALOG NUMBER | DESCRIPTION | UNIT PRICE | TOTAL PRICE |
|---|---|---|---|---|---|
| 2 | 1 | 99999-20 | MOUSE. | 100.00 | $ 100.00 |
| 3 | 1 | 126715-00 | Flame Drawer Option. Must be added to instrument for flame work. This option includes the Automatic Gas Control Drawer with comprehensive safety system and burner mount (120010), safety drain trap (122329), 10 cm air-acetylene burner head (121534-02), air hose (122629-01), fuel hose (24116), and all appropriate connectors and electronics. If the Gas Box option is NOT ordered, then an instrument suitable for use exclusively for furnace operation will be supplied. A later upgrade to flame operation is not possible. | 3,000.00 | $ 3,000.00 |
| 4 | 1 | 130518-00 | REFERENCE BEAM OPTION. Optional reference beam optical accessory eleminates the effects of source drift and the need to allow lamps to warm up. When activated, this featrue automatically resets the baseline prior to each analytical measurement. | 2,000.00 | $ 2,000.00 |
| 5 | 1 | 129396-00 | DEUTERIUM BACKGROUND CORRECTION SYSTEM. Optional background correction system available in addition to the standard Smith/Hieftje background correction system. | 1,320.00 | $ 1,320.00 |
| 6 | 1 | 130316-00 | NEC B/W/ GRAPHICS PRINTER. | 1,000.00 | $ 1,000.00 |
| 7 | 1 | 129966-00 | Flame Sensor Option. Built-in automatic sensor provides for sequential shutdown of flame gases should the flame extinguish for any reason. | 500.00 | $ 500.00 |
| 8 | 1 | 043707-02 | Capillary Tube, Replacement. Platinum-iridium for Model K, L-A and L-F nebulizer. | 319.00 | $ 319.00 |
| 9 | 1 | 121534-01 | Nitrous Oxide Burner Head (5 cm). All titanium construction, includes identifying collar for safety interlock system. | 575.00 | $ 575.00 |
| 10 | 1 | 001880-01 | CTF (Controlled-Temperature Furnace) 188 Atomizer. Includes graphite furnace cell, microprocessor controlled power supply, and accessories. Furnace cell is equipped with a pneumatic door that opens automatically for each injection and closes to maintain an inert environment. Uses delayed atomization cuvettes (DAC), as well as rectangular cuvettes with microboats. Cuvette temperature is measured and regulated with an optical temperature sensor. Power supply has 9 program stages, 4 ramp | 13,600.00 | $13,600.00 |

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| ITEM | QTY. | CATALOG NUMBER | DESCRIPTION | UNIT PRICE | TOTAL PRICE |
|---|---|---|---|---|---|
| | | | and 5 hold stages including "auto clean" and user selectable air-ashing for difficult matrices, all selectable via AA keyboard. Automatic warning and operation shutdown is effected if cooling water flow or purge gas pressure is inadequate. Supplies include 6 round, single-piece pyrolytic delayed atomization cuvettes, Operator's Manual, and Operational Startup Kit (124908). Power requirements: 208V/60 Hz.<br><br>This instrument can also be ordered with the following alternate power requirements:<br>220V/50 Hz (No. 01880-02) wired for European use.<br>220V/50 Hz (No. 01880-03) wired for International use (other than Europe).<br>208V/50 Hz (No. 01880-04) wired for International use (other than Europe).<br><br>NOTE: The CTF 188 requires the Options Compatability Kit No. 125077 be installed in VIDEO E series. | | |
| 11 | 1 | 124844-00 | FASTAC Aerosol Deposition System.<br>For use with CTF 188 Furnace Atomizer. Includes premix chamber, Model L nebulizer (No. 121648-03), vacuum system (No. 121260), and aerosol deposition module (124845). | 3,280.00 | $ 3,280.00 |
| 12 | 1 | 12736801 | ISC-150 Autosampler for Atomic Absorption Spectrophotometers, Flame and Furnace.<br>Consists of a programmable, random access sample changer with two 75 position removable sample trays capable of holding 13 mm diameter tubes and an auxiliary rack which holds 30 mL bottles for auto zeroing blanks, autocalibration standards, and rinse stations. | 4,500.00 | $ 4,500.00 |
| 13 | 1 | 12772901 | PS-150 Prep Station.<br>For use with ISC-150 or TJA 150 Autosamplers. Provides automatic sample preparation, dilution, addition of matrix modifiers, standards, and standard additions (60 Hz, 110 volts). | 4,500.00 | $ 4,500.00 |
| 14 | 1 | 062836-02 | Arsenic - As - VISIMAX II Hollow Cathode Lamp, Single Element. | 407.00 | $ 407.00 |
| 15 | 1 | 062933-02 | Cadmium - Cd - VISIMAX II Hollow Cathode Lamp, Single Element. | 292.00 | $ 292.00 |
| 16 | 1 | 062927-02 | Lead - Pb - VISIMAX II Hollow Cathode Lamp, Single Element. | 292.00 | $ 292.00 |

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| ITEM | QTY. | CATALOG NUMBER | DESCRIPTION | UNIT PRICE | TOTAL PRICE |
|---|---|---|---|---|---|
| 17 | 1 | 062847-02 | Mercury - Hg - VISIMAX II Hollow Cathode Lamp, Single Element. | 242.00 | $ 242.00 |
| 18 | 1 | 062938-02 | Selenium - Se - VISIMAX II Hollow Cathode Lamp, Single Element. | 369.00 | $ 369.00 |
| 19 | 1 | 062933-02 | Cadmium - Cd - VISIMAX II Hollow Cathode Lamp, Single Element. | 292.00 | $ 292.00 |
| 20 | 1 | 062934-02 | Chromium - Cr - VISIMAX II Hollow Cathode Lamp, Single Element. Requires the use of nitrous oxide, rather than air, as the flame oxidant. | 215.00 | $ 215.00 |
| 21 | 1 | 063041-02 | Copper - Cu - VISIMAX II Hollow Cathode Lamp, Single Element. | 226.00 | $ 226.00 |
| 22 | 1 | 062927-02 | Lead - Pb - VISIMAX II Hollow Cathode Lamp, Single Element. | 292.00 | $ 292.00 |
| 23 | 1 | 062819-02 | Nickel - Ni - VISIMAX II Hollow Cathode Lamp, Single Element. | 292.00 | $ 292.00 |
| 24 | 1 | 062811-02 | Zinc - Zn - VISIMAX II Hollow Cathode Lamp, Single Element. | 297.00 | $ 297.00 |
| 25 | 1 | 062941-02 | Tin - Sn - VISIMAX II Hollow Cathode Lamp, Single Element. Requires the use of nitrous oxide, rather than air, as the flame oxidant. | 275.00 | $ 275.00 |
| 26 | 1 | 004400-00 | AVA (TM) (Atomic Vapor Accessory). An automated system for mercury and the hydride-forming elements. Analytical steps proceed automatically at the touch of one button. Control module includes controls to set reaction time, reagent volume, and purge gas flow. System also includes a single 15 cm cell for hydrides and mercury, three Fleakers, three magnetic stirring bars, a quick-disconnect hose for purge gas, tubing and accessories.<br><br>Power requirements are 120V/60 Hz. The instrument can also be ordered with the following power requirements: 120V/50 Hz (04401); 240V/60 Hz (04402); 240V/50 Hz (04403); 100V/60 Hz (04404); 100V/50 Hz (04405). | 2,750.00 | $ 2,750.00 |
| 27 | 1 | 043098-00 | Integration Cable. For 157, 257, 357, 457, 451, 551, 651, 751, Video 22, Video 12, Video 11, S-12, or S-11. | N/C | N/C |

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MH1181



| ITEM | QTY. | CATALOG NUMBER | DESCRIPTION | UNIT PRICE | TOTAL PRICE |
|---|---|---|---|---|---|
| 28 | 1 | 124315-03 | WARRANTY EXTENSION. The warranty extension covers the cost of all parts, labor and travel from the end of warranty (120 days from date of shipment) to the end of the first year of ownership. Parts are warranted for one year from the date of shipment. | 2,250.00 | $ 2,250.00 |
| 29 | 1 | 99999-13 | SERVICE CONTRACT. Begins year two (2). | 4,750.00 | $ 4,750.00 |
| 30 | 1 | 99999-21 | MANUALS. Second set. | 2,000.00 | $ 2,000.00 |
| 31 | 1 | 99999-22 | SHIPPING, INSTALLATION, TRAINING. | 400.00 | $ 400.00 |
| 32 | 1 | 99999-23 | TRAINING, TUITION. For two (2) people each unit, formal school. | 1,000.00 | $ 1,000.00 |
| | | | SUB-TOTAL | | $89,805.00 |
| | | | LESS QUANTITY LAMP DISCOUNT | | $- 698.20 |
| | | | NET TOTAL | | $89,106.80 |
| | | | OPTIONAL ITEMS | | |
| | 1 | 124544-02 | Furnace Cuvette. Round, self-aligning, delayed atomization pyrolytic graphite cuvette. For use with or without the FASTAC aerosol deposition system. Box of 5. | 173.70 | $ 173.70 |
| | 1 | 124560-02 | Furnace Cuvette. Round, self-aligning, delayed atomization pyrolytic graphite cuvette. For use with the FASTAC aerosol deposition system. Box of 25. This kit is identical to (No. 124544-02), but contains 25 pieces instead of 5. | 742.50 | $ 742.50 |
| | 1 | 99999-24 | TRADE-IN ALLOWANCE on IL 251 AA with 655 furnace towards one Smith/Hieftje 8000 unit complete. | 18,606.80 | $18,606.80 |
| | 1 | 99999-25 | TRADE-IN ALLOWANCE on PE 2380 AA with HGA 400 furnace towards one Smith/Hieftje 8000 unit complete. | 18,606.80 | $18,606.80 |

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| ITEM | QTY. | CATALOG NUMBER | DESCRIPTION | UNIT PRICE | TOTAL PRICE |
|---|---|---|---|---|---|
| | | | ATOMIC ABSORPTION INSTRUMENTATION OPERATOR | | |
| | | | TRAINING COURSES | | |
| | | | FLAME | | |
| | | | Three-day course given in TJA laboratory includes lectures, lab work, literature, and instruction in routine operation/maintenance. Course is devoted mainly to flame AA, but includes some training in furnace atomization. Price includes all course materials, lunches, and use of AA instruments. | | |
| | | | Order one of the following as appropriate: | | |
| | 1 | 99950-01 | For one operator of any purchased Video TJA AA spectrometer. N/C | | |
| | | 99950-02 | For subsequent operators of any TJA AA spectometer or operator of LED AA's (S11, S12). $625.00 | | |
| | | 99950-03 | For non-owner of any TJA AA spectrometer. (Price of the course is refunded if a TJA AA spectrometer is purchased within a period of 12 months after the course is taken). $700.00 | | |
| | | | FURNACE | | |
| | | | Two-day course devoted to furnace atomization given in TJA laboratory includes lectures, lab work, literature and instruction in routine operation/maintenance. Operator may work with his own type of samples, or perform pre-assigned experiments. Price includes all course materials, lunches and use of TJA furnace atomizer. | | |
| | | | Order one of the following as appropriate: | | |
| | 1 | 99951-01 | For one operator of any purchased TJA furnace atomizer. N/C | | |
| | | 99951-02 | For one non-owner of any TJA furnace atomizer. $425.00 | | |

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| ITEM | QTY. | CATALOG NUMBER | DESCRIPTION | UNIT PRICE | TOTAL PRICE |
|---|---|---|---|---|---|

## WARRANTY

TJA warrants all instrumentation of its manufacture to be free from defects in material or workmanship and will, at its option, repair or replace, free of charge, or allow credit for any such goods found on examination by TJA to be defective under normal use and service within 120 days from date of shipment to Customer, provided TJA is promptly notified in writing upon discovery of such defects and provided any necessary return charges are prepaid. Thereafter, for up to one year from the shipment date, TJA shall furnish replacement parts, free of charge, to repair or correct defects in workmanship or material, provided that Customer shall pay TJA for labor at TJA's then prevailing rates. Replacement parts of TJA's manufacture supplied to Customer during the above warranty period carry the warranty of the instrument; parts supplied after the expiration of such period are warranted for 30 days from the date of shipment. Replacement parts are on an exchange basis and will be new standard parts or parts of equal quality. Exchanged parts removed from the instrument shall become the property of TJA. Other expendable items are excluded from this warranty. TJA MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EXCEPT AS STATED ABOVE.

Read the first time in full and on motion by Burns, seconded by Talarico, and duly adopted, read the second time by title and referred to the Committee on Committee of the Whole (and the City Plan Commission for recommendation) and Public Hearing to be held after due legal notice, at the Council Conference Room 128, City-County Building, Fort Wayne, Indiana, on _____, the _____, day of _____, 19____, at _____ o'clock M.,E.S.T

DATED: 7-24-90

Sandra E. Kennedy
SANDRA E. KENNEDY, CITY CLERK

Read the third time in full and on motion by Burns, seconded by Talarico, and duly adopted, placed on its passage. PASSED ~~LOST~~ by the following vote:

| | AYES | NAYS | ABSTAINED | ABSENT |
|---|---|---|---|---|
| TOTAL VOTES | 7 | | | 2 |
| BRADBURY | ✓ | | | |
| BURNS | ✓ | | | |
| EDMONDS | ✓ | | | |
| GiaQUINTA | ✓ | | | |
| HENRY | | | | ✓ |
| LONG | | | | ✓ |
| REDD | ✓ | | | |
| SCHMIDT | ✓ | | | |
| TALARICO | ✓ | | | |

DATED: 8-14-90.

Sandra E. Kennedy
SANDRA E. KENNEDY, CITY CLERK

Passed and adopted by the Common Council of the City of Fort Wayne, Indiana, as ~~(ANNEXATION)~~ (APPROPRIATION) (GENERAL) (SPECIAL) ~~(ZONING MAP)~~ ORDINANCE ~~RESOLUTION~~ NO. S-199-90 on the 14th day of August, 1990,

Sandra E. Kennedy
ATTEST
SANDRA E. KENNEDY, CITY CLERK

SEAL
Charles B. Redd
PRESIDING OFFICER

Presented by me to the Mayor of the City of Fort Wayne, Indiana, on the 16th day of August, 1990, at the hour of 11:30 o'clock A.M.,E.S.T.

Sandra E. Kennedy
SANDRA E. KENNEDY, CITY CLERK

Approved and signed by me this 20th day of August, 1990, at the hour of 9:45 o'clock A.M.,E.S.T.

PAUL HELMKE, MAYOR

DIGEST SHEET

TITLE OF ORDINANCE: Special

DEPARTMENT REQUESTING ORDINANCE: Purchasing

SYNOPSIS OF ORDINANCE: An ordinance approving the award of Reference No. 952 for an atomic absorption spectrophotometer with graphite furnace for the WPC Plant. The cost reflects the lowest and most responsive of three (3) vendors.

IF NOT LOWEST, WHO WAS AND WHY WERE THEY NOT AWARDED:

S-80-07-42

EFFECT OF PASSAGE: Purchase of AA and furnace needed to monitor industrial discharge and plant discharge for EPA Industrial Monitoring and NPDES Permit compliance.

EFFECT OF NON-PASSAGE: The WPC Plant laboratory needs the AA and furnace to perform analysis of wastewater samples for plant effluent and for Industrial monitoring as required by the EPA Industrial Pre-Treatment Program. Without the unit (as now) some analysis cannot be performed.

PRICE AGREEMENT:

PURCHASE ORDER: Yes

SOURCE OF FUNDING: WPC Plant 514-533-B101-4444

PRIOR APPROVAL: DATE:
(IF APPLICABLE)

BILL NO. S-90-07-42

REPORT OF THE COMMITTEE ON CITY UTILITIES

PAUL M. BURNS, CHAIRMAN
MARK E. GiaQUINTA, VICE CHAIRMAN
HENRY, LONG, TALARICO

WE, YOUR COMMITTEE ON CITY UTILITIES TO WHOM WAS

REFERRED AN (ORDINANCE) ~~(RESOLUTION)~~ approving the awarding of Reference #952 by the City of Fort Wayne, Indiana, by and through its Department of Purchasing and THERMO JARRELL ASH for the Water Pollution Control Plant

HAVE HAD SAID (ORDINANCE) ~~(RESOLUTION)~~ UNDER CONSIDERATION AND BEG LEAVE TO REPORT BACK TO THE COMMON COUNCIL THAT SAID (ORDINANCE) ~~(RESOLUTION)~~

| DO PASS | DO NOT PASS | ABSTAIN | NO REC |
|---|---|---|---|
| Paul M. Burns | | | |
| Janet G. Bradbury | | | |
| Clifus R Edmond | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

DATED: 8-14-90.

Sandra E. Kennedy
City Clerk